LISTING OF CLAIMS

The listing of claims provided below replaces all prior versions, and listings, of claims in the application.

5   1.   (Currently Amended) A method for detecting an information technology (IT) network cable disconnection, said method comprising:

detecting a change of connection state of a network cable connector using a sensor that resides in said network cable connector, wherein the network cable connector is defined to enable connection of an IT network cable to an IT network connected device

10   such that IT network signals can be transmitted between the IT network connected device and the IT network cable through the network cable connector;

transmitting a change of connection state signal from the sensor to a processor within the network cable connector;

operating the processor within the network cable connector to generate ~~generating~~

15   connection state information from the change of connection state signal ~~information supplied by said sensor~~; and

operating the processor within the network cable connector to communicate ~~communicating~~ said connection state information to a connection state monitoring utility within the IT network.

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2.   (Previously Presented)   The method as described in Claim 1, wherein said network cable connector is a cable plug.

3.   (Previously Presented)   The method as described in Claim 1,

25   wherein said network cable connector is a socket.

4.   (Original)   The method of Claim 1 , wherein said sensor includes a switch selected from the group that includes mechanical, electrical, resistive, optical and capacitive switches.

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5.   (Currently Amended) The method of Claim 1, wherein said network cable connector further comprises a~processor~and a memory.

6.   (Currently Amended) The method of Claim 5, <u>further comprising:</u>

10   <u>operating the processor within the network cable connector to use</u> wherein~said communicating~uses a communication protocol selected from the group that includes IPv6 (Internet Protocol Version 6), TCP (Transmission Control Protocol), finger, and SNMP (Simple Network Management Protocol).

15   7.   (Original)   The method of Claim 2, wherein said cable plug is attached to an endpoint of said network cable.

8.   (Previously Presented)   The method of Claim 5, wherein said network cable connector receives a communication from the connection state monitoring

20   utility within the IT network that interrogates said sensor regarding the connection state of said network cable connector.

9.   (Original)   The method of Claim 1, wherein said connection state information is transmitted wirelessly to said connection state monitoring utility.

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10. (Previously Presented) The method of Claim 1, wherein a unique identification is mapped to said network cable connector.

11. (Original) The method of Claim 10, further comprising communicating said unique identification with said connection state information.

12. (Original) The method of Claim 1, further comprising detecting, generating and communicating information related to power status, fuse status, carrier signal status and temperature.

13. (Original) The method of Claim 1, wherein electrical power for detecting said network cable disconnection is obtained from the network.

14. (Currently Amended) A method for detecting an information technology (IT) network cable connection state, said method comprising:

detecting a state change of a network cable connector within an IT network using a contact sensor that resides in said network cable connector;

transmitting a change of connection state signal from the sensor to a processor within the network cable connector;

operating the processor within the network cable connector to generate ~~generating~~ connection state information from the change of connection state signal ~~information supplied by said contact sensor~~;

receiving an interrogation signal at the processor within the network cable connector from a connection state monitoring utility within the IT network; and

<u>operating the processor within the network cable connector to communicate</u> ~~communicating~~ said connection state information from the network cable connector through the IT network to said connection monitoring utility using a network communication protocol in response to receiving the interrogation signal.

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15.   (Previously Presented)   The method of Claim 14, wherein said contact sensor includes a switch selected from the group that includes mechanical, electrical, resistive, optical and capacitive.

10   16.   (Currently Amended) The method of Claim 14, wherein said network cable connector ~~comprises an embedded processor and~~ <u>includes a</u> memory.

17.   (Currently Amended) The method of Claim 14, <u>further comprising:</u>

<u>operating the processor within the network cable connector to use</u> ~~wherein said~~
15 ~~communication protocol uses~~ a communication protocol selected from the group that includes IPv6, TCP, finger, and SNMP.

18.   (Original)   The method of Claim 17, wherein a cable plug is attached to an endpoint of said network cable.

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19.   (Original)   The method of Claim 14, wherein said connection state information is transmitted wirelessly.

20.   (Previously Presented)   The method of Claim 16, wherein a unique
25 identification is mapped to said memory of said network cable connector.

21.   (Previously Presented)   The method of Claim 14, further comprising reading the time that said network cable connector disconnected.

5   22.   (Original)   The method of Claim 14, further comprising detecting, generating and communicating information related to power status, fuse status, carrier signal status and temperature.

23.   (Original)   The method of Claim 14, wherein electrical power for
10   detecting said network cable connection state is obtained from the network.

24.   (Previously Presented)   A information technology (IT) network cable connector comprising:

    a sensor that senses a connection state of the IT network cable connector to
15   generate a connection state change signal; and

    a processor coupled to said sensor, the processor defined to respond to generation of the connection state change signal by transmitting connection state information over a communication network to indicate a connection state of said IT network cable connector.

20   25.   (Previously Presented)   The connector of Claim 24, wherein said network cable connector further comprises a memory coupled to said processor.

26.   (Original)   The connector of Claim 24, wherein said communication network communicates using a protocol selected from the group that includes IPv6, TCP,
25   finger and SNMP.

27.　　(Original)　　The connector of Claim 24, wherein said sensor is a contact sensor.

5　　28.　　(Original)　　The connector of Claim 24, wherein said processor operates in response to an interrogation signal to ascertain connection state information.

29.　　(Original)　　The connector of Claim 24, wherein said processor operates in response to said connection state change signal.

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30.　　(Original)　　The connector of Claim 24, wherein said connection state information is transmitted wirelessly.

31.　　(Original)　　The connector of Claim 24, wherein said sensor is selected
15　　from the group that includes mechanical, electrical, resistive, optical, and capacitive.

32.　　(Previously Presented)　　The connector of Claim 24, wherein said network cable connector comprises an RJ45 twisted pair connector.

20　　33.　　(Original)　　The connector of Claim 25, wherein a unique connector identification is mapped to said memory.

34.　　(Previously Presented)　　The connector of Claim 25, wherein said memory records the time that a network cable connector change in state occurs.

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35.   (Previously Presented)   The connector as described in Claim 24, wherein said network cable connector is a plug.

36.   (Previously Presented)   The connector as described in Claim 24, wherein said network cable connector is a cable socket.

37.   (Previously Presented)   The connector as described in Claim 24, wherein said network cable connector is a power connector.

38.   (Previously Presented)   The connector of Claim 26, wherein said network cable connector detects, generates and communicates information related to power status, fuse status, carrier signal status and temperature.

39.   (Original)   The connector of Claim 26, wherein electrical power for detecting said network cable connection state is obtained from the network.